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. EDITORIAL .

1945 Budget Resolutions

What may be termed Canada's first peacetime budget was brought down in the House of Commons on October 12th and the special feature is, of course, the reduction in both Income and Excess Profits Taxes affecting individual and corporate taxpayers.

It is not the purpose of this editorial to consider the various resolutions in detail as this has been carefully summarized in a special article which will be found elsewhere in this issue.

Since Governmental budget proposals are supposed to be most carefully guarded secrets until their formal presentation on the floor of the House, it seems rather a strange coincidence that the Governments of Canada, Great Britain, and the United States should have all adopted a tax rate of 60% applicable to "Excess Profits" in place of the previous 95% rate in the United States and 100% rate in Canada and Great Britain.

There is another important likeness in each of the budgets, and that is a continuation of staggering deficits. Canada forecasts a deficit of 2.15 billions, the United States 30.4 billions, and Great Britain in excess of 10 billions.

Our Government leaders have used every known device to impress us with the importance of maintaining "ceilings" thus avoiding the perils of inflation. Could it not be said that inflation must be avoided whilst we continue to borrow for the purpose of supporting deficits? There may not be the same concern evidenced if we ever reach a period of balanced budgets and the possibility of debt reduction, as it may turn out that we borrowed a dollar which was capable of purchasing ten loaves of bread and paid back with one which purchased only five.

A feature of the British budget is the restoration to pre-war levels of income tax allowances which, it is estimated, will result in some two million persons being relieved of taxation in the low income brackets. There are many among us here in Canada who had hoped for similar relief and it would be interesting to find out just what tax loss would result by increasing present exemptions from $1,200 to $2,000 in the case of a married man. The administrative cost both to employer and Government could be reduced tremendously and we might hear less about the working man's so-called "take home pay".

We are fast approaching the time when it will be absolutely necessary to reconstruct our whole financial set up. A determined effort will have to be made to keep national expenditures within the limits of reasonable taxation revenue if we expect to continue attracting foreign capital and mantaining our present standard of living. Another "must" is a complete revision of The Income War Tax Act which has not been revised (except for many amendments which now outnumber statute), since its inception in 1917.

New Members

Bay of Quinte

S/Sgt. H. Danter, On Active Service.
M. E. Bailey, Canadian Industries Ltd., Kingston.

Calgary

C. A. Ball, Dominion Bridge Co. Ltd.
A. J. McPhee, On Active Service.

Edmonton

Lloyd M. Ferguson, 11923-83 Street.
Capt. C. A. L. Barford, On Active Service.

Fort William-Port Arthur

Robert E. McCutcheon, Provincial Paper Ltd.
S. M. Craig, Johnston & Boon Co. Ltd.
Frank A. Bryan, Bryans Ltd.
A. L. Hunter, Fort William Hydro Commission.

Hamilton

W. B. Erwin, Student, McMaster University.
T. Yakemetz, International Harvester Co. Ltd.
E. A. E. Fagg, Steel Co. of Canada Ltd.
I. M. MacDonald, Canadian Westinghouse Co. Ltd.
J. M. MacBride, Dominion Glass Co. Ltd.
George Russell, Hamilton Cotton Co. Ltd.
J. P. Smith, Unemployment Insurance Commission.
E. T. Smith, Eaton Knitting Co. Ltd.
Sheila Stewart, Crown Dominion Oil Co. Ltd.
Donald A. Bartlett, Wilkinson & Grisenthwaite.
Walter D. Smithson, Canadian Westinghouse Co. Ltd.
S. J. Seeley, Hamilton Bridge Co. Ltd.
D. H. Beatty, Steel Co. of Canada Ltd.
James Rankin, Canadian Westinghouse Co. Ltd.
Clifford H. Wyse, American Can Co. Ltd.
Donald M. Taylor, Otis-Fensom Elevator Co. Ltd.
J. Frederick Murray, Steel Co. of Canada Ltd.
John V. Henderson, Steel Co. of Canada Ltd.
Clifford A. Leak, Canadian Westinghouse Co. Ltd.
Robert E. Elder, Steel Co. of Canada Ltd.
H. E. Lucas, Steel Co. of Canada Ltd.
Norman N. Caskey, Public Accountant.
V. Hedges, Canadian Westinghouse Co. Ltd.
A. M. Adamson, C.A., Clarkson, Gordon, Dilworth & Nash.
David A. Stewart, Cockshutt Plow Co. Ltd., Brantford.
G. M. Goodfellow, Mount Pleasant Road, Brantford.
William Watson, Steel Co. of Canada Ltd.
Ben Cioruch, Steel Co. of Canada Ltd.
John Newton, Eaton Knitting Co. Ltd.
Clare MacDonald, Wright, Pounder & Co.

Kitchener

Bernard Petker, Kaufman Rubber Co. Ltd.
J. M. Conway, Dominion Rubber Co. Ltd.
Walter G. Nelson, Dominion Electrohome Industries Ltd.

London

J. W. Brooks, Hyatt Bros. Construction Co.
Mrs. Marion G. Lynes, Sparton Co. of Canada Ltd.
Marjorie Rehder, Dr. W. J. Tillman.
F. B. Pearce, Sparton Co. of Canada Ltd.
Leonard G. Dutton, Silverwood Dairies Ltd.
Richard S. Cope, Canadian Synthetic Rubber Co. Ltd.
Janet M. McEwen, Unemployment Insurance Commission.
Luella C. Kerr, Unemployment Insurance Commission.

Montreal

Robert Longmire, Prudential Trust Co.
B. H. Galbraith, 96 Duke St., St. John, N.B.
Henry Pike, Shawinigan Chemicals tLd.
Gerard Belair, Familex Products Co.
J. G. Falardeau, 11078 St. Vital Blvd.
Ian B. Shaw, Dominion Oilcloth & Linoleum Co.
R. J. Cunningham, Shawinigan Engineering Co. Ltd.
Oswald Remillard, Granger Freres.

Niagara

George O. Shafley, Wellandport, Ontario.

Ottawa

James Twiner, On Active Service.
S/L J. C. S. Fair, On Active Service.
H. K. Balcombe, Dept. of National Defence.
W. H. Henderson, Ontario Hughes Owens Co. Ltd.
Albert Taylor, Department of Veterans Affairs.
Marcel P. Parent, Public Accountant.
Charles A. Leveque, Treasury Department.

Quebec

W. D. Muir, John Ritchie Co. Ltd.
L. A. Desrochers, Rock City Tobacco Co.
J. C. Letourneau, La Photogravure Artistique Ltd.
J. A. Plouffe, National Cash Register.
G. R. Patterson, Parisian Corset Mfg. Co.
Omer Couture, Komo Construction Ltd.
Paul H. Falardeau, 81 Cote du Passage, Levis, P.Q.
Herve Baribeau, Baribeau & Son, Levis, P.Q.
Alfred F. Muth, Industrial Life Insurance Co.
Paul Aymot, 133 Brown Avenue, Quebec.
Rene Carrier, Levis, P.Q.
Maurice, Nadeau, Canadian Auto Corpn.
J. E. Garneau, St-Louis de Courville, P.Q.
John Tessier, 89 rue Manrese.
J. Chas. Vezina, 51 Ave. Royale, Boichatel, P.Q.
Robert Noel, 524, 4e Ave., Limoilou, P.Q.

NEW MEMBERS

Toronto

Martin Donato, Tip Top Tailors.
Frank Vetere, Tip Top Tailors.
L. M. Schram, International Business Machines Co. Ltd.
L.A.C. Gage, W. R., On Active Service.
K. S. Moeser, International Business Machines Co. Ltd.
Geo. F. Plummer, Dunlop Tire & Rubber Co. Ltd.
J. L. Johnson, Dunlop Tire & Rubber Co. Ltd.
Chas. H. Wear, Dunlop Tire & Rubber Co. Ltd.
H. P. Cobban, Mono Paper Containers Ltd.
David B. Wood, Continental Can Co. of Canada Ltd.
Robert L. T. Baillie, Kendall Company of Canada Ltd.

Vancouver

Ralph S. Risk, Electro Weld Metal Products Ltd.
S/L Brian W. Power, On Active Service.
Emil J. Zak, Consolidated Mining & Smelting Co., Kimberley, B.C.

Victoria

E. W. Grimm, Sidney Roofing & Paper Co.
Sydney T. Fisher, Sidney Roofing & Paper Co.
W. W. Berridge, Yarrows Ltd.
James A. McArthur, B. C. Electric Railway Co. Ltd.
Robert M. Canova, Standard Furniture Co.
James R. Davies, Yarrows Ltd.
A. A. Linduer, British Admiralty Technical Mission.
M. D. J. Mackenzie, Dept. of Finance.
George C. Harris, Royal Jubilee Hospital.
George Marshall, Cost Inspection & Audit Divison.
William G. Radford, Dept. of National Health & Welfare.
James M. Robertson, Victoria Machinery Depot Ltd.
James McF. Scott, Cost Inspection & Audit Division.
Jack C. Townsend, Yarrows Ltd.
Frank W. West, Cost Inspection & Audit Division.
Albert C. White, Cost Inspection & Audit Division.

Windsor

Pte. P. A. Groff, On Active Service.

Non-Resident

L/S Donald H. Roy, On Active Service.
A. Harbinson, Newforge Ltd., Belfast, Ireland.
Lieut. D. D. Anderson, On Active Service.

Personals

Our sincere congratulations are extended to Mr. P. W. Wright, L.C.M.I., who was recently appointed Secretary-Treasurer of Shawinigan Chemical Limited. Previously he was Chief Cost Accountant of Shawinigan Water and Power Co.

Mr. Wright is President of Cost and Management Institute and is a Past President of the Canadian Society, and his many friends will be very pleased to learn of his appointment.

Chapter Notes

CALGARY CHAPTER

At our regular meeting held on October 10th, one of our own members, Mr. A. J. Bartle, R.I.A., spoke on the subject of "Basis of Elementary Accounting". Although the talk was directed to student members it proved very interesting and instructive to Registered and Associate members as well.

We wish to take this opportunity to welcome the following to our membership:

"Charlie" A. Ball, Accountant with the Dominion Bridge Co. Ltd., has joined our ranks as an "Associate" member and Harold Sakolfsky, employed by the Alberta Pacific Grain Co. (1943) Ltd., as a Student member.

We are also pleased to announce that W. Lloyd McPhee, R.I.A., a member of our Chapter and a Director of the Alberta Society, has been appointed Treasurer of The Canadian Western Natural Gas Light, Heat and Power Co. Ltd. Lloyd was previously Accountant of the same organization. Congratulations, Lloyd!

A very instructive Round Table Discussion on "Training and Direction of Accounting Personnel" was the main feature of the regular meeting of the Calgary Chapter of The Society of Industrial Accountants of Alberta held on October 24th.

Although a little late in reporting, we wish to congratulate Adam Galger, R.I.A., of our Chapter, on his promotion to Manager of Canadian Bakeries Ltd., Calgary Division.

Herb. Hutton, R.I.A., Chairman of our "Student Educational Committee", is now the proud "poppa" of a bouncing baby boy, born on the 15th October. We understand that both mother and son are doing well, and father can now talk on the telephone. Congratulations and best wishes, Herb., to you and family.

FORT WILLIAM-PORT ARTHUR CHAPTER

The monthly meeting of the Chapter was held in the Prince Arthur Hotel on October 15th where 40 members gathered together to hear F. B. Black, C. A. Mr. Black spoke on the recent changes as proposed by Finance Minister Ilsley in relation to both income taxes and the taxes on annuities and pensions.

Mr. Black's address was very interesting and many questions were asked and discussed. A vote of appreciation was extended to Mr. Black by Messrs. Strachan and Crawford.

HAMILTON CHAPTER

Hamilton Chapter is forging ahead under the able leadership of Geo. Greenhough, R.I.A., assisted by a live Executive Committee. The largest meeting since the beginning of the war was held on Thursday evening, Oct. 18th, in the Royal Connaught Hotel. Twenty-nine student members and two senior members were welcomed by the Chairman.

The speaker of the evening was Ralph Presgrave, manager of J. D. Woods and Gordon, industrial engineers. In a most interesting manner

he traced the history and development of the science of measurement from the ancient Egyptians to the present day. He described how variable and unreliable were the standards of the past, due to the system of using parts of the human body, grains and various other objects as a means of measurement. The speaker declared that the desire and ability to measure the most accurately has been a major factor in human progress. History shows that the refinement of this science has been largely stimulated by war. The country that is able to measure most rapidly and accurately is most likely to win a war.

Mr. Presgrave stated that it was only in the past fifty years that standards of truly reliable accuracy have been developed. Mass production which provided the essential equipment in the recent world war was dependent entirely upon the fine accuracy of interchangeable parts.

Measurement dominates our daily lives. The dependency of civilization on the accuracy of the clock is an excellent example.

William Bailey, R.I.A., moved a vote of thanks to the speaker.

W. H. Furneaux, R.I.A., and J. N. Allan, R.I.A., President and Secretary-Manager, respectively, of the Canadian Society of Cost Accountants, were present and spoke briefly of their recent visit to the western Chapters.

LONDON CHAPTER

London Chapter got away to a very good start in the new season at the first meeting held in Hotel London, Thursday, Oct. 25th, with a turn-out of about 40 members and guests. Incidentally this Chapter is going ahead with new Memberships enrollment now at the 68 mark and will make a good showing in the Trophy race.

We were fortunate to have as our guest speaker, Mr. W. H. Furneaux, Dominion President, who spoke to us on "What Management Expects of the Accountant", and Mr. J. Nelson Allan, Secretary-Manager, gave a brief outline of the aims and objects of the Society.

We regret that Mr. Ken Totten, one of our Directors, has been forced to resign due to medical reasons, and we wish him a very speedy recovery. Mr. J. J. Masse, of Craftools Ltd., has been elected to the Board in his place.

London Chapter have been fortunate in that they have at last been able to start a Lecture Course under the auspices of Prof. Jarmain, of the University of Western Ontario, some fifteen students taking Accounting 1. This, we hope, will lead to the establishment of 2nd year courses next year, with a new crop of students taking first year work.

TORONTO

The October meeting was conducted by the Student Section and as a result of their efforts, there were 135 present to hear Mr. A. G. Howey, R.I.A., speak on the Preparation and Operation of Budgets. In spite of the fact that he had a difficult subject Mr. Howey presented it in an interesting manner injecting many humorous thoughts to relieve the seriousness of the topic. Gord Mason, Chairman of the student section, was in charge of the meeting. One of the pleasing highlights of the meeting took place when the Chapter Chairman, Mr. John McKee, presented certificates of Registered Membership to Gord Mason and Herb Green.

At this meeting, the Chapter was host to members of the General Accountants Association and it is expected to be the forerunner of many such meetings.

VANCOUVER

The meetings of the Chapter so far this year have been exceptional in point of interest and attendance. Apart from its regular meetings, the Chapter joined forces with the British Columbia Section of the C.M.A. and Institute of Chartered Accountants in sponsoring a meeting on Settlement of Terminated Contracts. The meeting was held on September 25th and 275 persons were in attendance to hear Mr. W. F. Williams, F.C.A., Chairman of the Contracts Settlement Board, and Mr. F. E. Wood, R.I.A., Director, Cost Inspection and Audit Division. At the conclusion of their addresses, both Mr. Williams and Mr. Wood answered a number of questions.

On October 11th, Mr. W. D. McLaren, managing director of West Coast Shipyards, addressed the regular monthly meeting of the Chapter. Mr. McLaren made it very clear that it was absolutely essential for management and labour to combine their efforts wisely if the shipbuilding industry on the West Coast is to continue into peacetime production.

Current Legislation

By ADAM C. ZIMMERMAN, B.A.

HIGHLIGHTS OF PROPOSED BUDGET

1. **Pensions and Annuities.**
   (a) For 1945 and subsequent years the capital element in contractual annuities is to be exempt from tax.
   (b) For 1945 and subsequent years annual or periodic payments received under the provision of a will or trust are taxable only to the extent that they are paid or deemed to be paid out of the income of the estate or the trust.
   (c) Income derived from all approved superannuation funds or pension plans in 1946 and following years is exempt from tax in the hands of the trustees;
   Superannuation and pension funds and the contributions thereto by both Employer and Employee are further regulated in the Budget and considerable amendments have been introduced to the present provisions of the taxing statutes.

2. **Family Corporations**
   (a) Instead of the taxes otherwise payable by shareholders of a company classed as a family corporation in respect of earned surplus accumulated from the commencement of its 1917 fiscal year to the end of its 1939 fiscal year, the company is permitted to elect to pay a tax equal to the aggregate of the taxes calculated in respect of the allocable portion of each shareholder in accordance with a comprehensive table of amounts and rates which is too extensive to set forth in this brief resume.
   (b) The company is forced to an early election insofar as the foregoing provisions is applicable only if the company elects on or before 31st December 1947.

3. **General Tax Changes**
   (a) For 1944 and subsequent years provisions for deductions of unusual medical expenses shall be extended in the event of the death of the taxpayer to included expenses incurred or paid by him or his estate in a twelve month period commencing in a taxation year.
   (b) After 31st December 1945 it shall no longer be necessary to deduct the 7% tax at the source on payments of dividends, interest, or royalties.
   (c) For 1946 and following years the exemption of service pay and alolwances of members of the Navy, Army and Air Force while on active service in Canada or in the Western Hemisphere is rescinded. A similar provision rescinds the exemption hitherto extended to the remuneration of members of the Royal Airforce Transport Command.

4. **Exploration and Development**

In general, corporations, associations, syndicates, partnerships engaged in refining or marketing petroleum, exploring or drilling for oil, natural gas or minerals are relieved from the heavy burden of wartime taxation to a substantial extent.

5. **Excess Profits Tax**

(a) Individuals and partnerships are exempt from the 15% tax on total profits of 1946.

(b) The tax on excess profits of individuals and partnerships in 1946 is reduced from 100% of the excess profits to 60% of that portion of the excess profits which are in excess of 117.647% of the standard profits and the provisions for refund of that tax is rescinded.

(c) For 1946 corporations and joint stock companies are subject to certain rates of taxation in accordance with the category into which they may be classed and regard should be had to the proposed changes in the statutes in this behalf.

(d) On the profits of 1946 and subsequent years the minimum standard of profits is increased from $5,000.00 to $15,000.00 and that in case a taxpayer's standard of profits are on 1st January 1946 in excess of $5,000.00 but less than $25,000.00 they are increased by one-half the difference between their present amount and $25,000.00.

(e) The special rate of tax applicable to a business commencing after June 24, 1944, shall not apply to any case where, in the opinion of the Minister, there has been no bona fide commencement of a new or substantially different business.

6. **Personal Taxes**

(a) For persons other than corporations the tax for 1945 is reduced by 4% of the aggregate of the normal tax, the graduated tax and the investment surtax.

(b) For persons other than corporations the tax for 1946 is reduced by 16% of the aggregate of the normal tax, the graduated tax and the investment surtax.

(c) It is further proposed to provide for an additional tax dependent on the income of the taxpayer in cases where family allowance payments are received in order to adjust the benefits in respect of dependent children.

7. **Succession Duty**

(a) Where the Minister is satisfied that succession duty has become payable upon or with respect to the succession to any property and that subsequently within 5 years succession duty has again become payable with respect to the same property or part thereof, the amount of the succession duty payable on the second death with respect to the succession of such property is reduced in accordance with a scale of values, more particularly set forth in the Act itself.

8. **Special War Revenue**

(a) The sales tax shall not apply to machinery, apparatus and complete parts thereof which, in the opinion of the Minister of National Revenue, are to be used directly in the process of production of

goods, but this exemption does not apply to office equipment or motor vehicles.

(b) The retail purchase tax is not applicable to goods valued at not more than $100.00 included in baggage accompanying residents returning from abroad after an absence of not less than 48 hours.

(c) The 10% war exchange tax is rescinded.

(d) The excise tax of 25% imposed on fur and furs is reduced to 10% and that on a date to be fixed by Minister of National Revenue the existing exemption from sales tax of fur garments manufacturers as small manufacturers is to be withdrawn.

(e) The net premium tax on insurance companies is reduced by a credit for premium tax paid in any other country.

A budget of this nature is not, of course, without its criticism, both constructive and destructive. It is to be noted that in many cases the Minister has reserved discretionary powers. Government of the Dominion anticipates an overall deficit and expenditures for the next fiscal year will exceed income by a considerable amount. This budget, however, is generally considered to be a strong bridge between the economy of this Country at war and the economy of the Country at peace.

Current Literature Digest

By HAROLD BRICKER, R.I.A.

FUTURE INTERNATIONAL POSITION OF CANADIAN DOLLAR

The Canadian Government is paving the way for the Export Trade which is so commercially necessary in the future of this country. The Canadian Journal of Finance, in a recent article, brings out some interesting facts concerning the Canadian dollar on the foreign markets and especially its function as the sustaining factor between the U.S. dollar and the English pound.

There is evidence of the strength of the Canadian dollar in the recent budget removal of the 10% war exchange tax on imports. The effect of this should be fully analyzed by those businesses effected.

In some cases the 10% premium on U.S. funds has been additional profit. This applies in particular to outgoing or export trade. In the case of imports the effect may not have been a loss but it is a brake which tends to retard the flow of free funds to the U.S.

In many cases the premium has represented well over half the profits available for common stockholders. While the elimination of the premium might be counteracted by higher prices for certain of our primary products, the general effect on a large number of Canadian commodities would be depressing.

GENERAL MANAGEMENT

The Management Review under "General Management", refers to a survey of industry's peacetime plans, by Modern Industry. Executives of

hundreds of firms were asked to describe their plans for whittling costs. Some of the results of the survey included the following.

Executives are planning future business activity on a post war national income as great or greater than that of 1941. Alert executives have extensive plans for modernizing methods and equipment. Many are planning improved plant layout with better lighting and better plant housekeeping. In a number of cases provision has been made in the budgets for new equipment investment which in some firms has actually been ordered. This new equipment is provided for new plants as well.

It is not surprising to find that many of the businesses planning for new and more efficient plants are in the small class of fewer than 100 employees.

There is evident a broad interest, probably due to wartime advances, in maintaining better working conditions in the new plants. Up-to-date washrooms and lockers for many companies take first place in employee relation plans.

The cost accountant can be of valuable assistance to the executive in helping them to fully appreciate the competitive factors in new methods, equipment and also in new products. Major production and business changes are indicated in the immediate future.

There are two main economic groups in Canada interested in the exchange rate. Manufacturers who have to import a large part of their raw materials or component parts and importers of finished products for sale on the Canadian market, naturally prefer the Canadian dollar to have as high an exchange rate as possible so as to lower the cost to them of the materials they import. Specifically, this group likes the Canadian dollar to be at least no lower than the United States dollar, because many of their purchases are made in the United States.

On the other side of the fence are the raw material producers who sell most of their output in foreign markets. They naturally like a low rate of exchange, because that gives them a larger number of Canadian dollars for the foreign currency paid for their products and makes it easier for them to compete with other countries. Again, in specific terms this group would like the Canadian dollar to be as close as possible to the pound sterling because many of their markets are in Great Britain or other Empire countries and many of their competitors are in the sterling bloc.

By keeping the Canadian dollar halfway between the pound and the dollar, Ottawa has been able to satisfy both groups.

BLACK MARKETING

In The Federal Accountant there is an article on "Accountants and Black Marketing". In Canada, we have been remarkably free from the scourge of black market conditions. However, there might be value in commenting on this condition having in mind, "Cost Accounting and Black Markets". Cost Accounting is fast becoming, in Canada, a standardized and ethical profession.

The observations were made in discussing an accountant's duty when he discovers black market operations by a client.

The accountancy and auditing profession in Canada has established a very high standard of ethics and in general has achieved a high measure of compliance with that code. There have been departures, but the problem

of weeding out the "unfit" must of necessity be difficult and the task is slow. Reputable institutes take proper precautions to see that undeserved status is not given to the unworthy and to ensure that the profession holds and increases the confidence reposed in it by the business community. It will be generally agreed that the objective is a good one and that the whole future of the profession depends upon the average business man's opinion of how seriously or how lightly the accountant carries out his duties and honours the confidence placed in him. For this reason it would be unwise in a burst of enthusiasm for any particular cause to say that the accountant should be the watch dog of the morals of the commercial world and risk confidence by reporting every infringement of laws that comes under his notice. The accountant has many methods of ensuring that his hands are clean and that his professional soul is unsullied even if, in the process, he has to lose—as many have lost—a valuable client.

The point is clearly one of ethics. It is left with the auditing accountants or cost accountants, whether these matters, or their experience in them, justify any suggestion that in forcing their clients into a position requiring them to obey the laws of the country, they have placed their law-breaking client in any worse position than their law-abiding one, or that either client or accountant has been prejudiced by the result.

Cost accountants in observing professional ethics are really creating and establishing professional GOOD WILL.

Grain Accounting in Western Canada

By T. R. HUMPHRIES, R.I.A.

The activities of man include an infinite variety of businesses. Each one is specialized to a more or less degree and the larger a business the greater the likelihood of it being more complicated.

Business in all ages has required some form of accounting, even in the most primitive times. As civilization and industrialism developed and huge businesses were established, the need for competent accounting became even more important. This has resulted in the development of the industrial accountant and accounting engineer.

This type of accountant must have a thorough foundation in the knowledge of his profession. He must have the creative ability necessary for adapting an accounting system not only to meet the particular requirement of the business he is engaged in, but also to meet changed conditions. The occurrence of war and the encroachment of governments into civil business create a new set of complications for which the industrial accountant must be prepared.

Those in the accounting business appreciate that there are fundamental principles which must be preserved. These are much the same in any business. However, each business has certain peculiarities of its own and the accountant must develop what may be termed a superstructure, based upon general accounting fundamentals, which will be adapted to the particular requirements of that particular business. The efficiency of such a super-

structure depends upon the skill, imagination, and preferences of the person who inaugurates it.

The grain trading business is one of the oldest activities of mankind. When primitive tribes forsook their nomadic existence and located permanently in particular regions, they greatly developed agricultural ability. They scratched the soil with a crooked stick, seeded plants, and utilized the harvest for food. As they progressed in skill and knowledge their production increased. But the vicissitudes of nature, then as now, brought about crop failures in some regions as well as plentiful harvests in others. It was only natural that trade should develop with those with poor harvests exchanging other commodities for grain from regions where harvests were good.

Egypt was a bountiful producer of grain even in prehistoric times. Greece, the Islands of the Aegean, and latterly Rome and then Spain, obtained grain supplied annually from Egypt. The sons of Jacob were on an expedition to buy grain in Egypt when Joseph was taken captive.

As civilization spread over Europe the grain trade also developed. The Romans planted oats in Britain and soon there was a thriving export of that grain to Rome. The Baltic regions were early producers of grain, and supplies from Russia, Poland and other Baltic states found their way into Germany, France and other Western European nations. The British Isles were extensively engaged in grain production until industrial development in England. There was then an increased importation of food ,particularly grain.

The big impetus to the grain trade came about with the discovery of the Western Hemisphere and the development of agriculture in the Americas and Australia. The discovery of steam brought about the steamship and railway train which lessened transportation costs and enabled the grain produced in the New World on low priced land to be transported to the more densely settled countries of Europe.

In normal times the transportation of grain constitutes the largest percentage of international trade and wheat forms the bulk of grain shipments. In pre-war years the volume of wheat entering international trade ran from twenty million to thirty million tons a year.

The growing of wheat on the Canadian Prairies on a commercial scale followed the laying of the C. P. Railway. At first, grain was loaded from flat warehouses or direct from wagons into railway cars. The need of storage facilities, however, resulted in the building of standard grain elevators with a capacity of about 25,000 bushels.

The modern country elevator has many improvements but the construction is basically the same as the early elevator. The average country elevator capacity is 40,000 bushels. There are 1,746 country elevators in Alberta and over 5,600 of these country elevators in Western Canada.

Terminal elevators have a capacity of up to 7½ million bushels. The total of all grain storage capacity in Canada to-day is approximately 600,000,000 bushels but 172,000,000 of this includes bins of temporary construction. Grain in Canada is handled in bulk.

Grain starts to flow into commercial channels with the delivery by the farmer to the country elevator. Under normal conditions marketings are heavy and during and immediately after harvest, with the result that about seventy-five per cent. of the crop is marketed within a period of about three

months. Approximately twenty-five per cent is left to be marketed in the remaining nine months of the season. This creates a problem of organization in order to meet the peak of the rush. of the rush.

During the war the delivery of grain to the primary elevator has been regulated by the Canadian Wheat Board under a quota system. This was made necessary by war conditions which cut off many export outlets and caused the accumulation of enormous stocks of grain within Canada which backed up to the farms. The quota system was adopted in order to insure that each farmer would be able to deliver his fair share of grain, and that farmers who completed threshing early would not be able to take advantage of the available storage space to the disadvantage of other farmers who threshed later. The war also brought about other changes in marketing conditions with the result that many new regulations and emergency orders necessitated changes from time to time in accounting systems and office organization.

Crop and marketing conditions must be followed very closely for months before the new crop starts to move to market so that the volume of business which may be expected during the rush periods can be closely estimated, and plans can be made to take care of the day-to-day volume. When grain starts moving to market it is like water flowing down creeks and streams to a river and thence to the ocean. All accounting work must be completed in conjunction with the moving of the grain. It cannot lag.

In the grain business there are no two years alike. One reason is that grain crops are subject to the vagaries of nature and vary in volume and grade from year to year. Market conditions both in war and in peace keep changing and may affect either the primary flow of grain to elevators or shipments to terminals and to export markets.

The handling of grain in Canada is regulated by the Canada Grain Act under the administration of the Board of Grain Commissioners and by the Canadian Wheat Board under authority of the Canadian Wheat Board Act.

In receiving grain at a country elevator the operator must issue a grain ticket in a form prescribed by the Canada Grain Act. The grain may be delivered to country elevators for cash at the time of delivery or for storage. The Grain Act provides for five kinds of grain tickets which may be issued to cover various conditions under which grain is delivered to the country elevator. These tickets are:

1. Cash Ticket.
2. Special Bin Ticket.
3. Graded Storage Ticket.
4. Interim Cash Purchase Ticket.
5. Interim Storage Receipt.

The cash ticket covers a cash transaction for the grain as it is delivered at the elevator. Price, grade and dockage are definitely agreed upon at that time. This ticket is readily negotiable.

The special bin ticket is a receipt issued to the farmer for the gross bushels of each load delivered and stored in a special bin. Gross bushels means the total weight of the load, which includes dirt, weed seeds and other foreign matter. Later a dockage will be assessed by percentage against the grain for all foreign matter contained in it. The identity of the grain de-

livered by the farmer for special bin storage is preserved in the special bin used only for grain of that particular farmer. Later he may order it to be loaded in a railway car and shipped to a terminal elevator or he may sell for cash to the elevator, provided he and the elevator operator agree on the grade and dockage.

The graded storage ticket is issued as a receipt to the farmer for grain which he wishes to store but on which the grade and dockings is definitely agreed upon at the time of delivery. Grain delivered on this basis may be stored with other grain of like kind and quality.

The interim cash purchase ticket is a receipt for grain and a contract to purchase. It represents grain which the farmer wishes to sell on a cash basis but for which he and the agent cannot agree as to the proper grade and dockage. The agent, or operator, therefore, issues an interim cash purchase ticket and a sample of the grain is sent to the Government grain inspector for his decision as to the true grade and dockage. Upon receipt of the Government inspector's advice of grade and dockage the interim cash purchase ticket is surrendered by the farmer and cancelled and a regular cash ticket is then issued for any balance which may be due.

The interim storage ticket is given as a receipt for grain to a farmer who wishes to store his grain but does not wish to hold a special bin and who cannot agree with the elevator agent regarding the grade and dockage. In this case, also, a sample is sent to the Government inspector for grading. The agent bins the grain according to his judgment of the grade and upon receipt of the Government inspector's advice of grading, the interim storage receipt is surrendered by the farmer and the operator then issues a regular graded storage ticket.

In addition to these forms of grain tickets, some companies use a stored purchase cash ticket. This form is used when the operator purchases grain for which special bin or graded storage tickets were issued at a previous date.

A farmer who has stored his grain has alternative methods of disposing of it. It may be sold while it is stored in the elevator, when it is loaded in a railway car, or as spot wheat when it arrives at the terminal. The monopoly possessed by the Wheat Board, the limitation of deliveries due to quota restrictions, and the fact that wheat delivered in either large or small quantities obtains the same price, has led to the general practice of farmers selling their grain at the local elevator instead of shipping and selling on track or in spot position at the terminal.

Since September 27, 1943, the Canadian Wheat Board has been the sole purchaser of wheat delivered into commercial channels by primary producers in Western Canada. Each farmer who delivers wheat gets a fixed initial payment according to the grade, and a participation certificate which entitles him to any further payment which may result from any surplus accumulated through sales by the Board.

When a farmer is holding his grain in storage at a country elevator, at the terminal, or in transit in railway cars, he may take an advance, or loan, up to approximately 75 per cent. of the value of the grain. This places him in the position of owning the grain on margin. These advances must be carefully controlled in order to insure the maintenance of sufficient margin.

It is necessary to protect against wide fluctuations in market values. Storage charges and interest will accumulate and diminish the margin.

The average country elevator capacity is about 40,000 bushels and may be filled and emptied several times during the course of a season. The operator at a busy shipping point may take in six to eight thousand bushels of grain and at the same time load probably three or four railway cars during a day in the fall season.

At night he has to sit down in the elevator office, many of them on lonely sidings scattered throughout the Prairies, and prepare reports to cover the entire business of the day. The purchases which he has made must be listed by grades on a cash purchase report. Graded storage tickets must be listed on a graded storage report. Tickets that have been issued for grain stored in special bins must be listed. Reports must be completed for all shipments and local sales. When he is all through reporting the day's business he is required to complete a summary or general report, showing stocks of each grade of grain in the elevator, the grain which he has handled for the season up to date, the grain handled by his competitors, and also report on weather and road conditions.

When these reports with the duplicates of tickets attached, arrive at the head office the first operation is to list the quantity of each grain purchased by all elevators, as this information is usually required first thing in the morning by the salesmen in order to plan hedging operations. Prices, calculations and listing of all tickets and reports must then be checked.

The accounting system which follows the checking of the reports may vary from the old six foot columnar ledger to a completely mechanized system, but in the final analysis, regardless of what system is used, it must provide for:

(a) A summary of all business for the day.

(b) Adequate stock records for each individual elevator to show the quantities of each grade of grain received and shipped.

(c) The exact stock and sales position of the entire elevator system from day to day.

The local elevator is charged with all grain received, and given credit for grain shipped or sold locally. Grain which is stored by farmers in country elevators is handled twice through the records. It goes into storage and then out of storage. It is then taken in as grain purchased.

The varieties and grades of grain must be accounted for in the same manner as dollars and cents. The 1944-45 list of the Canadian Wheat Board quotes prices on 393 grades of wheat. Grades of other grains are less numerous. In actual practice, however, the accounting may be limited to probably fifty grades of wheat and fifty grades of the other grains. In average years the bulk of the Western Canadian crop of each grain is of high quality and probably 75 to 80 per cent. will be confined to the top three grades of each grain.

One important fundamental in grain accounting is the setting up of inter-locking features to prove the accuracy of the bookkeeping for each grade of grain received and shipped and to tie up grain entries with money entries. This involves a system of dual posting which means that when posting the quantity of bushels of grain purchased, the amount of money paid for that grain should also be posted in conjunction with the posting of

the bushels. The same applies to sales and any other records in which grain and money can be tied in together. The relationship which is maintained between bushels and money is an important controlling factor. There has been a trend lately towards separating grain and money accounts but, in my opinion, it is a departure from sound grain accounting principles.

All grain is accounted for in bushels and pounds. There are one hundred cents in every dollar, which makes arithmetic a very simple matter as far as money is concerned, but wheat has 60 pounds to the bushel, oats 34 pounds to the bushel, barley 48 pounds, flax and rye 56 pounds. Pounds must be converted to bushels in the same manner as cents to dollars.

Perhaps the best way of illustrating the dual posting method practiced in grain accounting is to imagine you are dealing in the currency of foreign countries. On one side of the ledger is posted the foreign currency purchased and on the other, the equivalent in Canadian funds. The latter represents the cost in Canadian money of the foreign currency. Transpose this picture into a ledger for the various grades of wheat ,oats, barley, flax, rye, corn, sunflower seed, etc., and you have the grain ledger.

The grain ledgers provide a type of perpetual inventory. At intermediate periods during the year the grain inventory is obtained from the ledgers by the simple method of deducting bushels sold from bushels purchased.

Once or twice a year, or more often if necessary, the stocks of grain in each elevator are weighed and a cut-off is made in the books in order to determine the results of weighing, grading and docking by the local agent. The last weigh-up in the season is usually used as a basis for the year-end inventory.

Cash must be placed in the hands of farmers who sell their grain. Therefore, the elevator company must see that there is a sufficient supply of funds at every station in order to meet cash tickets, orders and cheques. Banks take care of these payments at stations where they are located, but at a great many points in Western Canada it is necessary for the comapny to appoint a local merchant as paying agent. The paying agent draws funds as required and submits regular reports of disbursements. At the head office there is a payors' ledger in which payors are charged with funds received and are credited with disbursements. In this ledger there is usually an account for cash tickets paid. This provides one of the system's safeguards or interlocking features. It was previously mentioned that purchases by cash tickets at country points were recorded in a purchase ledger for each station, along with the corresponding cash entry. The amount of cash tickets issued as shown in the purchase ledger must agree with the amount of cash tickets paid and recorded in the payors' ledger after taking outstanding tickets into consideration. Similar clearing or controlling accounts are used extensively.

Revenue from grain is acquired through trading, handling, service charges, commissions, storage, and treatment. Handling charges, storage, and charges for other elevator services are regulated by the Board of Grain Commissioners. Handling, or elevation charges, in both country and terminal elevators, includes the cost of elevating the grain, storing for 15 days free, and loading the grain into railway cars or vessels.

The service charge and commissions are fees for services in handling

and disposing of consigned shipments and may also include brokerage on customers' future transactions.

The treatment of grain includes cleaning, drying, blending, and any other processing which may be necessary to meet an export standard for grade.

Gross profit from trading is merely the difference between purchase value and sales value after taking into account the results of futures transactions, if any. Due to the control of marketing of wheat and flax under fixed prices now exercised by the Canadian Wheat Board, and the limitation of the price range in coarse grains, gross profit from trading has developed largely into a matter of handling charges. However, as the futures markets has in the past been an important factor in grain operations under the open market system, it may be interesting to learn something about the use of the futures market and trading of grain where a system of fluctuating prices is in effect.

A considerable period may elapse between the time the grain is purchased at the country elevator and the time it is eventually shipped and sold. To overcome the threat of loss from this source, grain is sold as it is bought, the purchase and sale being almost a simultaneous transaction. This is called "Hedging".

When an open market exists grain prices change from day to day. The relationship between the price paid for grain and the amount realized from the combined operations of futures trading and grain sales, should be such so that the margin of earning or handling charges is not affected to any marked extent by price fluctuations.

It is a peculiar situation that the trader in grain under this system is more interested in margins and in spreads than in prices, because, unless he is a speculator, price has no bearing on his margin of profit.

The futures market provides the medium through which hedging can be done. The sale of futures insures against loss through fluctuations which may take place during the period between purchase and sale of the actual grain.

Futures are sold in an amount equivalent to each day's purchases in order to maintain an even balance between purchases and sales. Futures trading in Western Canada is carried on through the Winnipeg Grain Exchange, which in the days of the open market was one of the world's largest cash market for wheat. The Exchange provides a meeting place for members whose operations in buying and selling result in the establishment of price levels. The changing opinion of dealers, millers, exporters, importers, and speculators causes fluctuations almost from minute to minute.

Trading in Futures means the making of contracts for the purchase or sale of grain for delivery in certain specified months in the future. The Futures months quoted on the Winnipeg Grain Exchange under the open market system are October, November, December, May and July, and the intention of the Futures contract is for delivery of grain of certain specified grades in the terminals of Pt. Arthur and Ft. William.

The contracts call primarily for the delivery of 1 Northern wheat in units of 1,000 bushels but other specified contract grades may be delivered at a fixed discount according to the grade delivered in lieu of 1 Northern. These

grades are termed contract grades. Through the operation of the Futures market it is possible to hedge purchases by contracting to deliver grain in a certain month in the future. Some times it is found that delivery cannot be made during the month in which the Futures sold are deliverable. This makes a switching or spreading operation necessary by which the Futures which have been sold for the nearby month are brought back and futures are then sold for a more distant month.

Sales are usually made basis "Exchange of Futures". Prices are quoted at so much over or under the future. Supposing a sale was made basis 3 under Oct and the seller agreed to take Oct at $1.00. The grain would be invoiced at 97c per bushel. The Oct would be exchanged at $1.00. The buyer and seller, therefore, "wash out" futures contracts against the actual delivery of the grain. The futures transaction is reported to the Clearing House by both parties.

The purchase and sale of the grain has resulted in a quadruple transaction.

1. Purchase of Grain
2. Sale of Futures.
3. Sale of Grain.
4. Purchase of Futures.

The order may be changed under certain circumstances but the quadruple nature of the sale of grain still exists.

In some cases grain is sold "flat", which means that it is sold without the exchange of futures and in that case the seller must buy futures in order to adjust the hedging position.

The gain or loss between purchase and sale of the actual grain would be offset by a corresponding gain or loss on the futures transaction. For example, suppose grain is bought at a country elevator at a price basis of $1.25 per bushel. When it reaches the terminal and is eventually sold, the price has dropped to $1.00. There is a loss of twenty-five cents per bushel. However, the future was sold at $1.25 and when it is taken back against the sale of grain it is bought back at $1.00 which results in a profit of twenty-five cents per bushel. The gain on the one transaction offsets the loss on the other.

Grain may be delivered in contract grades to the clearing house in order to complete a futures contract, but that is not a matter of general practice owing to the fact that market spreads for various grades fluctuate, which results in what is termed a premium over the fixed spreads at which grades may be delivered on futures contracts. The clearing house is the Winnipeg Grain and Produce Clearing Association, through which all transactions between traders and brokers are cleared daily.

The investment in grain which is hedged by futures is always the market value from day to day by reason of the fact that the gain or loss on futures is adjusted daily through the clearing house.

Those who are long or short in futures must make a daily adjustment with the Clearing House for the difference between the closing price of the day and that on the previous day. If the market goes up, those on the short side of the futures contracts must pay and those who are long will receive the difference from the Clearing House. This operation is reversed when the market goes down.

To illustrate, assume that you have purchased 1 Northern wheat in the country at a basis of $1.25 per bushel. You have sold futures against it at the same price in order to complete your hedge. The next day the market declines to $1.20. The sum of 5c per bushel, being the difference between the closing price of the day and the closing price of the previous day, will be paid to you by the Clearing House. This is then the position: $1.25 was paid for the actual grain. 5c per bushel was refunded by the Clearing House. The net amount, therefore, is $1.20 per bushel, which is the value of the grain according to the closing price of the day.

An important function of the grain accounting system is the accumulation of figures to show the daily purchase and sales position in order to maintain an even balance between purchases and sales. The terms "long" and "short" apply to a position which is out of balance.

You may ask who buys the futures which are sold as hedges against daily purchases from farmers. On the other side of the market are the millers, exporters, importers, and speculators. Each may reverse his position on the market, but they are chiefly on the long side. The miller buys futures as a hedge against flour contracts or for milling requirements. The exporter and importer buys against sales. The speculator takes up the slack between the legitimate dealers. The pools contend that the sale of agricultural products by any method which depends upon the speculator for balance is definitely wrong and that the speculator should not be an influence in the establishment of the daily prices of grain.

Grain may be sold by the farmer in any position after it is delivered to the country elevator. The prices quoted for grain are known as street, track, spot and futures prices. When a farmer wishes to sell his grain upon delivery at a country elevator, he is quoted what is known as a street price. Track prices are quoted on grain when it is loaded in railway cars and moving towards the terminals. Futures and spot prices represent the value of grain in store at terminals. The difference is that spot prices apply to grain which is immediately deliverable, and futures prices apply to grain deliverable any time during the months specified. Normally the prices quoted for futures are higher than track or spot prices. The difference or spread between the two reflects the cost of carrying the grain to the futures month. Very often, of course, there is a demand for some particular grade or grades of spot grain which would result in a premium over the futures price, but this is not what might be termed a normal market condition.

The following costs must be taken into consideration, in addition to freight, in determining the price of grain when it is bought at the country elevators:

1. Handling Charges.
2. Commission or Service Charges.
3. Freight on Dockage.
4. Cleaning and Separation.
5. Bank Exchange and Payor's Commission.
6. Interest on Funds.
7. Risk of Grade and Dockage.
8. Risk in Hedging.

The prices at which futures are sold is not always identical with the price used as a basis for purchases. Generally purchases are made first.

9. Risk of Spreads.

There is no insurance against changes in premiums or spreads between grades. This is particularly applicable to the lower grades.

The risk in hedging and the risk of spreads was eliminated when the Canadian Wheat Board took over all wheat in Canada. The other costs would amount to about 3½c per bushel for wheat.

Unlike other commodities, grain inventories are valued at market prices on the date of closing the books instead of at the cost price. It has been explained that the money invested in grain is the current market value owing to the fact that fluctuations in the price of futures have been adjusted from day to day through the clearing house.

Grain is shipped from local country elevators to mills, interior terminals, or to the terminals at the head of the Lakes and, in the case of Alberta, the Pacific Coast ports.

Carloads of grain enroute to terminals are graded at inspection points by Government inspectors. As cars arrive at the terminal, the grain is weighed by Government weighman and samples are again taken by Government inspectors.

After the grain has been unloaded and the scale report has been completed, the terminal issues an outturn report which shows the net weight of the grain, the amount of the dockage, the grade, and all terminal and railway charges. These outturns are forwarded to the shippers and it is on this basis that the local country elevator gets credit for out-going grain.

In the terminal, grain must be cleaned and binned according to grade and if necessary, it will be dried. Upon payment of freight charges the terminal issues warehouse receipts which must be surrendered upon shipment of the grain. When grain is loaded out, a form of manifest is written upon which is listed the warehouse receipts surrendered for shipment and all charges which have accrued against the grain.

Warehouse receipts are registered with the Board of Grain Commissioners upon issuance, and cancellation of warehouse receipts is reported upon shipment. The Board is therefore able to keep a complete record of stocks by grades in each terminal elevator.

At Ft. William there is a Lake Shippers' Clearance Association, formed by shippers in order to facilitate the loading of boats. A shipper may accumulate warehouse receipts representing grain in store at several terminals. Ordinarily, it would be necessary for a boat to berth at each one of these terminals in order to complete a cargo, but the Association is able to direct the boat to the terminal which is able to load all of the particular grade of grain required. Wheat flows from Ft. William to the Eastern seaboard and thence into the export markets of the world.

The war restricted exports from the Pacific Coast outlets almost entirely to shipments to the United States. Before the war grain was shipped from the Pacific Coast to the Orient and through the Panama Canal to the United Kingdom and Continental Europe. There are indications that this trade may open up again before long. Some grain is now being shipped from our Pacific Coast terminals to Australia and New Zealand.

Some of the factors which enter into the accounting and cost of export

grain are freight, marine insurance, cargo tax, outturn insurance, superintendence, and foreign exchange. Very often grain is sold for export shipment at some future date at a price which is quoted in foreign currency. As the amount agreed upon is not paid until ocean bills of lading are made available, there is an element of risk in respect to a fluctuating market in foreign exchange. This is obviated to a large extent by selling foreign exchange futures, by which it is agreed to deliver to the purchasing party a certain amount of the specific foreign exchange at a time which will coincide with the actual shipment of grain.

Cost accounting for country elevators is limited to the costs of operation of individual elevators. Direct costs are classified under each elevator point. Indirect costs are allocated either on a unit basis for the number of elevators operated or in proportion to the importance of the elevator as a handling unit.

Costs in relation to the volume of the commodity handled is not an important factor for the reason that wide variations exist in the volume of grain handled from year to year. In a year of small crops, the cost per bushel would be very high and when better than average crops occur, the cost would be low. For this reason, the cost of handling a bushel of grain is determined over a period of years instead of over a short period.

Statistical information is very necessary in the grain trade, as it is for many other lines of business and the accumulation of statistics relating to any particular business is another interesting and educational activity.

Budgeting of expenses is not generally practiced as the movement of grain from farm to country elevators to terminals and to export markets is not generally predictable with any degree of accuracy. However, the practice of estimating revenue and expenses, item by item in advance of the year-end, is an experience which no accountant should overlook because in endeavoring to analyse the source of revenue and expense he will have to determine the nature of the various factors which enter into production and marketing. That is essential in order to make any reasonable forecasts. He will gain an intimate knowledge of the business in which he is engaged which is probably not available to any other person in such a general way.

Some Observations on Accounting Problems in Connection with Termination of War Contracts

An address given by F. E. Wood, Director, Cost Inspection and Audit Division, Office of the Comptroller of the Treasury, Ottawa, in Vancouver, B.C., September 26th, to a joint meeting of the Canadian Manufacturers' Association, Society of Industrial Accountants of British Columbia, and the British Columbia Institute of Chartered Accountants, following an address by Mr. W. F. Williams, F.C.A., Chairman, Contract Settlement Board, on the subject, "Termination of War Contracts", to the same meeting.

Among the several important points which Mr. Williams has covered in his address, I would like to discuss with you for a short time, those which

EDITOR'S NOTE:—The address by Mr. F. W. Williams was published in our last issue but the meeting to which Mr. Williams gave his address was inadvertently omitted.

refer particularly to the accounting problems and items which have repeatedly come to light in dealing with claims already submitted to us for review and report. As accountants, practising either independently or as employees of contracting firms, you will, I am sure, fully appreciate Mr. Williams' suggestion that the Manual should be read very carefully. The answer to a great many questions that arise is available in the Manual if we are all thoroughly familiar with it.

Reference was also made to the necessity for adequate records. This has been extremely important throughout the war in determining the costs of war production, and is even more important for the protection of both the contractor and the Crown in terminations. Within practical limits, the more complete the contractor's records, the quicker the claims can be reviewed prior to final settlement, and the quicker the contractor can obtain his money, dispose of his war problems, and devote his entire efforts to post-war business.

There are, of course, penalties provided in the M&S Act for failure on the part of a contractor to maintain adequate cost records, and these penalties may be quite substantial. However, they are far over-shadowed by the effect on the contractor's post-war business if termination settlement is unduly delayed because of the inability of the Government to ascertain the essential information necessary to arrive at settlement from the contractor. If a cost submission or termination claim is not in accordance with accounts and records, its verification will be very difficult if not impossible.

References quoted are to the April, 1945, Revised issue of "Manual of Procedure of Termination of Contracts".

Page 10, Section (b) (ii)

In this clause is set out the provision which specifically requires that no payment will be made to a contractor in respect of items which have already been included in the price paid or payable for work completed. In reviewing claims, our problem is that of determining whether or not payment has been made in the price under a specific contract for any item for which a termination claim is filed. For example: Inventories physically existing at date of termination must be carefully scrutinized to see that they do not include items already charged to production costs of completed goods, as otherwise there would be duplicate recovery.

Page 11, Section (c)

No reimbursement shall be made for materials . . . which have been or may be rejected after inspection.

Reference also to Page 13, Paragraph 3(1) indicates the interpretation to be placed on disallowances of costs of rejected work. In this reference it is stated this will not preclude reimbursement of the cost of normal spoilage and overages.

Page 11, Section (d)

"In no case shall the Contractor be entitled to be reimbursed any amount, which taken together with any amounts paid or due or becoming due to the Contractor under the contract, shall exceed the total amount payable for the work to be performed under the contract."

Page 11, Section (f)

"The materials . . . . will in no case be in excess of what would have been required for performing the contract in full."

In accordance with the provisions of this Section, excessive inventories must be noted, and the contractor should limit his claim to items suitable for the contract and reasonable in relation to the cancelled portion thereof.

Page 13, Paragraph 1

"In certain cases . . . . the contractor may claim for the unamortized portion of the capital expenditures."

This is the one exception, so far as I know, where the contractor may receive reimbursement of a capital expenditure charge as a part of his claim, i.e., other than where a capital expenditure contract is cancelled.

Page 14, Paragraph 8

"While it is not necessary to take an actual physical inventory in order to complete the Request for Interim Payment . . . . it is absolutely essential that, immediately on receipt of the Termination Notice, instructions should be issued by the Contractor to take a physical inventory."

In anticipation of the filing of the final claim, it is absolutely essential that immediate arrangements be made for the taking of a physical inyentory upon receipt of Termination Notice. Physical inventories taken at a later date are always difficult to prove and the tie-in is more incomplete when the date is remote.

Page 17, Paragraph 4

"Final settlement cannot be made unless and until an examination of the inventory and a review of the Final Claim have been made by representatives of the Board. This may involve an audit of the entire claim or it may simply mean a test check thereof."

It will be noted that the extent of verification will depend on the circumstances and that in many cases it will not be considered necessary to carry out a detailed audit in full. However, the contractor's records should be in such condition that the Government auditors may be able to make such verification as is considered necessary or desirable in the particular case. Good records speed up settlements.

CHAPTER V — PREPARATION OF INVENTORIES

Page 19, Section 4—Pricing

"The inventory should be priced on the following basis:

Controlled and other raw materials—at laid-down cost.

Manufactured parts—at cost of direct materials, direct labour, direct burden and other direct charges.

Purchased parts—at laid-down cost.

Finished goods—at contract prices.

Costs may be determined on any acceptable basis . . . . as long as such method has been consistently followed by the contractor in the past . . . .".

This reference is most important from a cost point of view.

For your information, we define laid-down cost as follows:

"Laid-down cost is that shown by the purchase invoice plus freight-in and duty, plus foreign exchange and war exchange tax, etc. where applicable."

Handling, storage or carrying charges should not be included in "laid-down cost". All of these are expense items and as such form part of overhead, whereas materials are an item of prime cost. In this regard, it may be noted that it is not always necessary for us to go to the contractor's books for the purpose of verifying the pricing of materials, eg., controlled

metals for which prices are established. However, if contractors were allowed to put into their "pricing" of raw materials, charges for the expense of storage, etc., it would be doubly difficult to check prices—in fact it would be impossible to do so without reference to the contractor's accounts and records. Therefore, every effort possible should be made by contractors to adhere closely to the pricing requirements, i.e., laid-down cost on raw materials, etc., as set out in the Manual.

In connection with the pricing of inventories, it is further required that

"General and Administrative expenses should not be included in the prices of raw materials, parts or work-in-process, but these should be set out separately in the claim unless the cost system of the contractor provides for their inclusion as an element of direct burden."

Generally speaking, fair and reasonable expenses under the foregoing provision will be admitted by the Contract Settlement Board providing they are consistent with the Contractor's usual accounting practice and have been approved by the Treasury Cost Inspection and Audit Division.

Where a contractor sets up a separate termination department to deal with all termination claims passing through his plant, separate expenses will be charged to it in the accounts and records of the contractor, and an overhead rate calculated to cover these expenses will be recoverable against termination claims when filed. In some of the larger companies such arrangements have already been made. On the other hand, there is a tendency on the part of some contractors to add a surcharge of, say 5% or 10% to cover the "Costs of handling a termination claim" or under some similar designation, to ensure complete recovery of his "expenses" in connection with the terminated contract and for which surcharge there is no established basis whatsoever. Where there is a charge of this nature added as a percentage or lump sum, we must examine the claim in order to ascertain whether or not recovery has already been made in the direct costs or in the applied overhead included therein.

CHAPTER VIII — LABOUR

Page 25, Paragraph 1

"The contractor will be entitled to claim as part of the costs of a contract, the wages of any employees required by the regulations of National Selective Service to be retained on his payroll for a period following the Stop Work Order."

It should be recognized that these employees' wages should only be recoverable provided said employees are not otherwise employed. In other words, if they are engaged on other work, they are properly chargeable to the costs of such other production and should not be included in the termination claim.

CHAPTER IX — COSTS SUBSEQUENT TO TERMINATION

Page 26, Paragraph 2

"Only such expenses as can be definitely identified as pertaining to the cancelled portion of the terminated contract will be allowed. These costs must be clearly segregated in the books of accounts and must be capable of being verified by audit."

I would like to stress the necessity for careful study of the explanation on Schedule C—"Costs Subsequent to, but Arising Out of Termination"

which contains a comprehensive summarization of what may be claimed and included under this heading. Conversely there are some costs which must be considered non-allowable since they are not covered by this reference. These include cost of maintaining or continuing the contractor's organization after the termination date, e.g., fixed charges such as Depreciation and/or Rent, taxes and other charges wherever these are not essential for the purposes of the contract. Another item which must be considered as non-allowable in a termination claim is "Rehabilitation". Rehabilitation is not a termination cost and should not be claimed by the contractor or treated as such in the processing of termination claims. The question as to what is Rehabilitation expense may be clarified if we consider it to be the act of restoration or reinstatement of other production.

Costing Memorandum M&S 433

In considering the relationship of the costing memorandum to this discussion, the first point to be observed is that the uncompleted portion of a terminated contract automatically becomes a cost-plus conract. Therefore, it is important to obtain a clear understanding and a knowledge of the implications of M&S 433.

Reference to Schedule G of M&S 1823, Question 15, will indicate that contractors are required to:

"Specify any costs charged to this contract and included in the claim which would not be admissible as an element of cost under costing memorandum M&S 433."

This is the tie-in between the costing memorandum M&S 433 and the termination forms. You will also note that throughout Schedule G of the forms and the Manual, reference is repeatedly made to the term "cost".

For the purposes of the Treasury Cost Inspection and Audit Division, we refer to costs as those determined in accordance with M&S 433. In a broad sense, this interpretation can be considered as generally acceptable because it is apparent that the Contract Settlement Board in dealing with termination claims, wish to know specifically what charges included therein are costs not admissible under M&S 433. This is clearly indicated in Question 15 referred to above. Hence, the Board and the settlement officers will wish to know the exceptions which exist and the extent by which the charges in the claim fail to conform with ordinarily acceptable costs.

Although it is not possible to find a uniform definition of costs, M&S 433 does provide a yardstick for measuring costs. Therefore, by using this as a uniform basis, it becomes possible to make comparisons which would not be possible otherwise.

The principal elements of cost are set out in the first section of the costing memorandum, but to give you a better understanding of the different elements of cost, the following example may be helpful:

Labour—Direct or Productive	$ 30.00
Material—Direct	40.00
Factory Overhead or Burden (@ say 100% of Direct Labour)	30.00
Total Factory Cost or Manufacturing Cost	$100.00
Administrative Overhead (@ say 6% of Manufacturing Cost)	6.00
Total Cost	$106.00

The above illustration will indicate to you why there is a different effect obtained under this method than by the simultaneous application of a direct charge on productive labour, i.e., the inclusion of factory and administrative overhead items in one total. If the latter method were followed in the above illustration, the combined overhead rate would be calculated as follows:

Direct Labour		$30.00
Factory Overhead	$30.00	
Administrative Overhead	6.00	
Total Overhead being 120% of Direct Labour		$36.00

Factory overhead or burden usually includes the cost of non-productive labour, repairs and maintenance of machinery and equipment, factory materials and supplies, etc.—administrative overhead usually covers such expenses as executive and office salaries, office supplies, stationery, etc. Therefore, it is preferable to have a separation of the overhead rate so that recovery of the respective items may be most closely associated in point of time with the incurred expenses.

In considering M&S 433, the non-allowable items are of special significance in that they constitute exceptions or differences between charges which may be incorporated in the contractor's claim as a result of his method of determining costs, as against those which are acceptable to us. For the most part, these come under the heading of Indirect Costs pertaining to factory and administrative overhead and are set out under the heading "But there shall not be included as costs any of the following". A few comments on some of the items may be of assistance to you in dealing with these as follows:

Item 1: Interest

This is regarded as a financial cost of doing business. As such we do not admit it in any form as being in accordance with M&S 433. It is an exclusion and has been so treated throughout our dealings and our issued reports. Therefore, wherever interest is included in a termination claim, the extent by which it affects the costs should be ascertained. Then when the profit allowance is being considered, due recognition by the Board may be given to this factor in order that any exclusion necessary may be calculated to bring the contractor's claim onto a basis of uniformity with other contractors for whom no interest charges have been included.

The foregoing comments also apply in the case of Item 14, "Bond Discount or Finance Charges".

Item 5: Losses on Other Contracts

In some cases in dealing with contractors, settlement of operating contracts has been effected by the Dept. of Munitions and Supply on an overall basis, particularly under renegotiation proceedings. By so doing, it must be recognized that excessive profits on individual contracts may be offset by losses on others. Since the terminated portion of a contract becomes a cost-plus contract, no such extraordinary treatment of losses can be incorporated as a charge to the termination claim. This should also be considered as an exclusion where termination claims are filed for groups of contracts.

Item 11: Reserves for Contingencies, Repairs, etc.

Any increase in a reserve account which is not represented by an incurred

expense is non-allowable under M&S 433. Nevertheless, we have always followed the practice of allowing a contractor reasonable and proper expenses actually incurred. The Income Tax Branch treat this expense in a similar manner.

What is meant by an increase in reserve account, is a provision made in advance for an expenditure which is anticipated in the future, e.g., we have found that some contractors may, in a war year, provide a reserve for post-war rehabilitation by making charge of say $100,000 a year against their Profit and Loss account. While this may be considered sound business practice from a commercial point of view, it is obvious that as far as production costs or termination of a war contract are concerned, it must be treated as an exclusion.

« STUDENT SECTION »

COST ACCOUNTING

Comments by A. V. HARRIS, C.A.

FUNDAMENTALS OF COST ACCOUNTING

Question 5. (15 Marks)

In a manufacturing plant that operates a process cost system the expenses of one department for a month were:

Previous Department Cost	$27,000
Material Cost added in this department	30,832
Labor Cost in this department	14,120
Manufacturing Expense of this department	10,590
Total Cost to be accounted for	$82,542

The Production record for the month was:

Product received from previous department	100,000 lbs.
Product finished and sent to next department	71,840 lbs.
Product finished and remaining in this department	4,160 lbs.
Product unfinished in this department	24,000 lbs.

Examination of the unfinished work disclosed that one fourth of it was seven eighths completed; one half of it was one half completed; and one fourth of it was one sixth completed.

Of the material used in the department, one half was used at the start of the process; one fourth when the process was one third completed; and one fourth when the work was three fourths completed.

Labor and manufacturing expenses were incurred at a uniform rate throughout the process of manufacture in the department.

Compute the value of the inventories at the end of the month.

STUDENT SECTION

SOLUTION QUESTION 5

Material Cost Per Pound

Previous Department

$27,000÷100,000 lbs.=27c per lb.

This Department

	Used at Start	Used at One-Third	Used at Three-Fourths
Material cost	(½) $15,416	(¼) $7,708	(¼) $7,708
Product finished and transferred	71,840 lbs.	71,840 lbs.	71,840 lbs.
Product finished and in department	4,160 lbs.	4,160 lbs.	4,160 lbs.
Product seven-eighths completed (¼)	6,000 lbs.	6,000 lbs.	6,000 lbs.
Product one-half completed (½)	12,000 lbs.	12,000 lbs.	....
Product one-sixth completed (¼)	6,000 lbs.	....	....
Total at each stage of process	100,000 lbs.	94,000 lbs.	82,000 lbs.
Material cost per pound	15.416c	8.2c	9.4c

Comments Question 5

This problem differed from many problems in process cost questions in that the material was not consumed at the beginning of the process or at a uniform rate through the progress of work in the department, but was added in specific amounts at certain stages. The material cost should not be apportioned between the different inventories on the basis of completed units but required to be allocated among them in proportion to the number of pounds that were processed at each stage where material was added. It was, therefore, necessary to calculate the number of pounds processed at each stage where material was added and the cost of the material added at that stage, and to compute the average cost per pound processed at that point. The material cost per pound of completed and uncompleted work in this department consisted of the sum of the material cost added to the work at each stage of completion. The labour and manufacturing expenses would be computed in the usual way since these costs accumulated uniformly throughout the process.

Candidates who did not recognize the need of a more complex calculation of material costs, but endeavored to apply a simpler method, omitted the difficult part of this problem and were in consequence alloted few marks for their solutions.

The material cost per pound for the work at each stage of completion is:

Completely finished product	15.416c+8.2c+9.4c	=33.016c
Seven-eighths finished product	15.416c+8.2c+9.4c	=33.016c
One-half finished product	15.416c+8.2c	=23.616c
One-sixth finished product	15.416c	=15.416c

Labor and Manufacturing Expense Cost Per Pound

Since Labor and Manufacturing Expense incur at a uniform rate

throughout the process, it is necessary to reduce the finished and unfinished work to terms of finished product in order to apportion these expenses.

Production in Terms of Finished Units

Product completely finished and transferred	71,840 lbs.
Product finished and in department	4,160 lbs.
Product seven-eighths finished, 6,000 lbs. x 7/8	5,250 lbs.
Product one-half completed, 12,000 lbs. x 1/2	6,000 lbs.
Product one-sixth completed, 6,000 lbs. x 1/6	1,000 lbs.
Production in terms of finished product	88,250 lbs

Labor Cost Per Pound of Finished Product

$14,120÷88,250=16c per lb.

Manufacturing Expense Per Pound of Finished Product

$10,590÷88,250=12c per lb.

Computation of Inventories

Product finished and transferred to next department:		
Cost from previous department, 71,840 lb. @ 27c	$ 19,396.80	
Material cost, 71,840 lb. @ 33.016c	23,718.69	
Labor cost, 71,840 lb. @ 16c	11,494.40	
Manufacturing expense, 71,840 lb. @ 12c	8,620.80	
Total	$63,230.69	
Product finished and remaining in department:		
Cost from previous department, 4,160 lb. @ 27c	$ 1,123.20	
Material cost, 4,160 lb. @ 33.016c	1,373.47	
Labor cost, 4,160 lb. @ 16c	665.60	
Manufacturing expense, 4,160 lb. @ 12c	499.20	
Total	$ 3,661.47	
Unfinished work, seven-eighths completed:		
Cost from previous department, 6,000 lb. @ 27c	$ 1,620.00	
Material cost, 6,000 lb. @ 33.016c	1,980.96	
Labor cost, 5,250 lb. @ 16c	840.00	
Manufacturing expense, 5,250 lb. @ 12c	630.00	
Total	$ 5,070.96	
Unfinished work, one-half completed:		
Cost from previous department, 12,000 lb. @ 27c	$ 3,240.00	
Material cost, 12,000 lb. @ 23.616c	2,833.92	
Labor cost, 6,000 lb. @ 16c	960.00	
Manufacturing expense, 6,000 lb. @ 12c	720.00	
Total	$ 7,753.92	
Unfinished work, one-sixth completed:		
Cost from previous department, 6,000 lb. @ 27c	$ 1,620.00	
Material cost, 6,000 lb. @ 15.416c	924.96	

Labor cost, 1,000 lb. @ 16c	160.00
Manufacturing expense, 1,000 lb. @ 12c	120.00
Total	$ 2,824.96
Total Inventories (total of above) which agrees with total cost to be accounted for	$ 82,542.00

ADVANCED COST ACCOUNTING

Question 3. (12 Marks)

The Cost Accountant of the Livewire Manufacturing Company has been requested to prepare for the Board of Directors a memorandum on the assistance which his cost accounting system provides in the annual examination of the accounts of the Shareholders' Auditors. As Accountant, write the memorandum.

Solution Question 3

Material to be included in this memorandum would be:—

(1) The system of internal check which is very much in evidence in a cost accounting system.

(2) The numerous supporting documents necessary to the proper functioning of a cost system, which are of great assistance to the auditor.

(3) The series of interlocking entries which enable the auditor to be assured that irregularities are automatically noted.

These points could be developed by illustrating:

(1) Inventory and stores accounting control for Raw Materials and Finished Goods.

(2) Work-in-Process control through production records.

(3) Payrolls.

(4) Accounts Payable.

(5) Sales and Cost of Goods Sold.

Comments

The material required to answer this question should have given the candidate no particular difficulty, as the theory is fully discussed in all standard texts in cost accounting, and the cost accountant in actual practice deals with these points continually. According to the examiner, the candidates in general presented only a part of this information and their methods of setting forth the data were rather poor. It was not considered a satisfactory reply if the candidate merely prepared a brief summary such as is indicated in the solution above. This information was sufficient as far as fundamental points were concerned, but the presentation should be expanded at least to a point where the Directors might be prepared to admit that the cost system might provide some assistance to the shareholders' auditors.

GENERAL ACCOUNTING

Comments by H. P. WRIGHT, C.G.A., R.I.A.

ACCOUNTING I

Question 3 (35 Marks)

A. B. COOK

Trial Balance, December 31, 1944

Cash	$ 200	Accounts payable	$ 13,400
Bank	7,100	Bank loan	20,500
Building	30,000	A. B. Cook, capital	81,000
Accounts receivable	26,260	Sales	218,000
Bills receivable	14,100	Reserve for bad debts	840
Land	1,000		
Merchandise inventory, Jan. 1, 1944	37,400		
Purchases	178,000		
Selling expenses	17,200		
Warehouse and delivery expenses	14,320		
Interest on bank loan	860		
Administrative expenses	7,300		
	$333,740		$333,740

Additional Information:

Merchandise on hand December 31, 1944, $36,302.00.

Uncollectable accounts receivable to be written off, $160.00.

The reserve for bad debts is to be increased to 3% of the accounts and bills receivable.

Depreciation on building, 2% per annum.

Prepaid insurance included in "Warehouse and delivery expenses", $260.00.

Prepare a trading and profit and loss statement and a balance sheet from the foregoing trial balance and additional information.

Model Answer Question 3

A. B. COOK

Trading Statement

For Year Ending December 31st, 1944

Merchandise Inventory, January 1, 1944	$ 37,400.00	Sales	$218,000.00
Purchases	178,000.00		
	215,400.00		
Less Merchandise Inventory, December 31, 1944	36,302.00		
Cost of Goods sold	179,098.00		
Gross Trading Profit	38,902.00		
	$218,000.00		$218,000.00
Selling expenses	$ 17,200.00	Gross trading profit	38,902.00
Warehouse and delivery expenses	14,060.00	Net trading loss	784.00
Administrative expenses	7,300.00		
Estimated Loss by Bad Debts	526.00		
Depreciation on Building	600.00		
	$ 39,686.00		$ 39,686.00

Profit and Loss Statement

For the Year Ending December 31, 1944

Net Trading Loss	$ 784.00	Net Loss	$ 1,644.00
Interest on Bank Loan	860.00		
	$ 1,644.00		$ 1,644.00

Balance Sheet As at December 31, 1944

Current Assets:			
Cash		$ 200.00	
Bank		7,100.00	
Accts. Receivable	$ 26,100.00		
Bills Receivable	14,100.00		
	$ 40,200.00		
Less Reserve for Bad Debts	1,206.00		
		38,994.00	
Merchandise		36,302.00	
			$ 82,596.00
Prepaid Expenses:			
Prepaid insurance			260.00
Fixed Assets:			
Land		$ 1,000.00	
Building	$ 30,000.00		
Less Reserve for Depreciation	600.00		
		29,400.00	
			30,400.00
			$113,256.00

Current Liabilities:		
Accounts Payable	$ 13,400.00	
Bank Loan	20,500.00	
		$ 33,900.00
Proprietorship:		
Capital at Jan. 1, 1944	$ 81,000.00	
Less Net Loss for Year	1,644.00	
		79,356.00
		$113,256.00

Comments

In reviewing the papers submitted it was found that a number of students had presented the balance sheet in very poor form particularly with reference to accepted practice and instructions on grouping of the various assets and liabilities. Certain papers submitted included "prepaid expenses" as "deferred charges" and in many cases proper details of Proprietorship or Capital were omitted.

There is only one way to learn the correct presentation of financial statements both to management and your examiners and that is by careful study of your lesson material and constant practice on the problems submitted so that the form and groupings become second nature to you.